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(71) Applicant (for all designated States except US): **CJ Corporation** [KR/KR]; 500, Namdaemunno 5-ga, Jung-gu, Seoul 100-802 (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CHUNG, Sung Oh** [KR/KR]; #402-405, Saetbyeol Sambu Apt., Bundang-dong, Bundang-gu, Seongnam-si, Gyeonggi-do 463-749 (KR). **LEE, Bheong-Uk** [KR/KR]; #149-1, College of Health Sciences, Kosin Univ., Dongsam-dong, Yeongdo-gu, Busan 606-701 (KR). **KANG, Whan-Koo** [KR/KR]; #210-1503, Expo Apt., Jeonmin-dong, Yuseong-gu, Daejeon 305-761 (KR). **JU, Jae Yeong** [KR/KR]; #104-401, Mujigaemaoul Daelim Apt.,

Gumi-dong, Bundang-gu, Seongnam-si, Gyeonggi-do 463-703 (KR). **KOH, Eun Sung** [KR/KR]; #302, Yangcheon Yeonlip, Woncheon-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-380 (KR). **PARK, Sung-Sik** [KR/KR]; #101-701, Mokryun Town, Irwon-dong, Gangnam-gu, Seoul 135-230 (KR). **PAKR, Young Hoon** [KR/KR]; #111-102, Mujigaemaoul Daelim Apt., Gumi-dong, Bundang-gu, Seongnam-si, Gyeonggi-do 463-703 (KR).

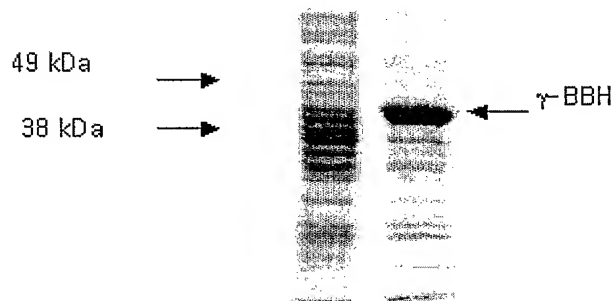
(74) Agent: **SON, Min**; 19th Floor, City Air Tower 159-9, Samseong-dong, Gangnam-gu, Seoul 135-973 (KR).

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[Continued on next page]

(54) Title: GAMMA-BUTYROBETAINE HYDROXYLASE ORIGINATED FROM NEUROSPORA CRASSA



Lane 1 : Protein molecular size marker,

Lane 2 : E.coli BL21 w/o g -BBH gene,

Lane 3 : E.coli BL21 w/ g -BBH gene and induced by 1mM IPTG

(57) Abstract: Disclosed is a polynucleotide encoding  $\gamma$ -butyrobetaine hydroxylase ( $\gamma$ -BBH) originating from Neurospora crassa. Also disclosed are a recombinant vector comprising the polynucleotide, a transformant transformed with the recombinant vector,  $\gamma$ -BBH encoded by the polynucleotide, and a method of preparing L-carnitine, which comprises hydroxylating  $\gamma$ -butyrobetaine using  $\gamma$ -BBH encoded by the polynucleotide.

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